Nutrition and Wellness

Curriculum Content Frameworks

Please note: All assessment questions will be taken from the knowledge portion of these frameworks.

ATTENTION: This course requires special training and purchase of additional equipment. For more information concerning the approval to teach this course, contact Suellen Ward at 501/682-1115 or by email at suellen.ward@arkansas.gov

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Curriculum Content Frameworks

Nutrition and Wellness

Grade Levels: 9, 10, 11, 12	Prerequisite: TP Foundation Core
Course Code: 493200	
Course Description: Nutrition and Wellness enables students to analyze the interaction of nutrition, foods, and fitness for overall wellness of individuals and families throughout the lifespan. In this course students will develop nutrition and fitness habits to make wise decisions regarding healthy living and prevention of disease through these practices. As active learners, students develop higher order thinking skills and academic skills in the areas of math, science, language arts and social studies through the evaluation of relevant nutrition and wellness information. This course is recommended for all students regardless of their career cluster or pathway, in order to build basic nutrition and wellness knowledge and skills, and is especially appropriate for students with interest in human services, wellness/fitness, health, or food and nutrition related career pathways.	

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Unit 1: Nutrition, Wellness, and You
Hours: 12

Terminology: Culture, Emotional health, Health, Lifestyle, Nutrition, Organic food, Physical health, Psychological health, Social health, Technology, Wellness

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do			ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**		**Skill Group**	**Skill**	**Description**
1.1 Define terms related to nutrition and wellness	1.1.1	Demonstrate knowledge of nutrition and wellness terms using correct context	Foundation	Reading	Applies/Understands technical words that pertain to Nutrition & Wellness [1.3.6]
				Writing	Applies/Uses technical words and concepts [1.6.4]
1.2 Identify the aspects of wellness 1) emotional 2) physical 3) psychological 4) social	1.2.1	Analyze the importance of each aspect of wellness	Thinking	Reading	Comprehends written information and applies it to a task [1.3.8]
				Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
1.3 Evaluate the effect of lifestyle choices on wellness	1.3.1	Identify lifestyle choices of teens	Thinking	Decision Making	Evaluates information/data to make best decision [4.2.5]
	1.3.2	Compare and contrast the choices made by teens		Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
	1.3.3	Chart lifestyle choices that contribute to disease	Foundation	Arithmetic/ Mathematics	Constructs graphs/charts/ tables [1.1.16]
1.4 Examine wellness as a choice	1.4.1	Demonstrate wellness as a personal choice	Foundation	Reading	Identifies relevant details, facts, and specifications [1.3.16]

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do				ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge		**Application**		**Skill Group**	**Skill**	**Description**
1.5	List the steps of the decision-making process in order 1) Identify the decision to be made 2) Identify available resources and possible options 3) Weigh pros and cons of each option 4) Select the best option 5) Act on the decision 6) Evaluate the results of the decision	1.5.1	Apply the steps of the decision-making process to achieve a wellness goal	Personal Management	Responsibility	Establishes and implements a plan of action [3.1.5]
		1.5.2	Develop an FCCLA Power of One project: A Better You Module	Thinking	Organizational	Demonstrates decision making skills [4.2.4]
					Problem Solving	Devises and implements a plan of action to resolve problem [4.4.3]
1.6	Compare the impact of cultural, emotional, psychological, and social influences on food choices	1.6.1	Describe how culture influences food choices	Foundation	Reading	Comprehends written information and applies it to a task [1.3.8]
		1.6.2	Examine the effect of emotions on food selections	Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
		1.6.3	Identify ways family, friends, and society influence nutritional habits	Interpersonal	Cultural Diversity	Respects others' personal values, cultures, and traditions [2.2.4]
1.7	Examine the development of regional foods from available global and local food supplies	1.7.1	Associate foods with correct regions	Thinking	Creative Thinking	Makes connections between seemingly unrelated ideas [4.1.6]
		1.7.2	Classify factors contributing to foods becoming regional favorites			
1.8	Identify ways global food choices are affected by supply, production, and distribution worldwide	1.8.1	Describe how changes in national and international food production and distribution systems affect the food supply	Thinking	Reasoning	Comprehends ideas and concepts related to global food choices [4.5.2]
1.9	Research government agencies' guidelines for health claims concerning wellness issues	1.9.1	Differentiate the function of the Food and Drug Administration (FDA), US Department of Agriculture (USDA), and Environmental Protection Agency (EPA)	Thinking	Problem Solving	Comprehends ideas and concepts related to wellness issues [4.4.1]
		1.9.2	Separate the responsibilities of government agencies and consumers in protecting the food supply			

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do		ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**	**Skill Group**	**Skill**	**Description**
1.10 Summarize the roles of food industry, technology and government in food choices	1.10.1 Examine legislation and regulations related to nutrition and wellness issues	Foundation	Reading	Comprehends ideas and concepts related to the influences in food choices [1.2.1]
	1.10.2 Determine how availability and selection is influenced by technology	Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]

Unit 2: The Nutrition Health Connection
Hours: 20

Terminology: Amino acid, Antioxidant, Atherosclerosis, Carbohydrate, Cholesterol, Complete protein, Complex carbohydrates, Dehydration, Dental caries, Diabetes mellitus, Dietary fiber, Diuretic, Essential amino acid, Fat, Fat soluble vitamin, HDL, Hypoglycemia, Incomplete protein, Lactose intolerance, LDL, Macromineral, Micromineral, Minerals, Non essential amino acid, Nutrient, Phytochemicals, Protein, Saturated fatty acid, Simple carbohydrates, Starch, Sugars,Trans-fatty acid, Unsaturated fatty acid, Vegetarianism, Vitamins, Water soluble vitamin

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do		**ACADEMIC and WORKPLACE SKILLS** What the Instruction Should Reinforce		
Knowledge	**Application**	**Skill Group**	**Skill**	**Description**
2.1 Define terms related to the nutrition health connection	2.1.1 Demonstrate knowledge of nutrition and wellness terms using correct context	Foundation	Reading	Applies/Understands technical words that pertain to Nutrition Health Connection [1.3.6]
			Writing	Applies/Uses technical words and concepts [1.6.4]
2.2 List the six nutrients: 1) Carbohydrates 2) Proteins 3) Fats 4) Vitamins 5) Minerals 6) Water	2.2.1 Create a mnemonic device/graphic organizer for the nutrients	Foundation	Reading	Applies/Understands technical words that pertain to subject [1.3.6]
			Writing	Applies/Uses technical words and concepts [1.6.4]
		Thinking	Knowing How to Learn	Develops personal learning strategies-note taking, clustering, related items, flash cards, etc. [4.3.2]
2.3 Describe the role of carbohydrates on health, appearance, and peak performance	2.3.1 Chart the relationship of sugars, starches, and fiber to dental health, hyperactivity, diabetes, hypoglycemia, lactose intolerance, sugar addition, and weight	Foundation	Arithmetic/ Mathematics	Applies mathematical formula to solve a problem [1.1.3]
				Converts different units of measurement [1.1.17]
	2.3.2 Categorize food sources as simple or complex carbohydrates			Uses calculator to solve mathematical problems [1.1.36]
			Listening	Comprehends ideas and concepts related to the role of carbohydrates [1.2.1]
			Reading	Comprehends written information for main ideas [1.3.7]

CAREER and TECHNICAL SKILLS			ACADEMIC and WORKPLACE SKILLS		
What the Student Should be Able to Do			What the Instruction Should Reinforce		
Knowledge	**Application**		**Skill Group**	**Skill**	**Description**
			Foundation	Science	Applies scientific principles related to the role of carbohydrates[1.4.5]
			Thinking	Problem Solving	Demonstrates logical reasoning in reaching a conclusion [4.4.2]
				Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
2.4 Describe the role of protein in health, appearance, and peak performance	2.4.1	Identify essential and non essential amino acids	Foundation	Listening	Comprehends ideas and concepts related to proteins [1.2.1]
	2.4.2	Categorize food sources as complete or incomplete protein		Reading	Comprehends written information for main ideas [1.3.7]
	2.4.3	Analyze and calculate daily protein needs in calories and grams using a kitchen calculator		Arithmetic/ Mathematics	Applies mathematical formula to solve a problem [1.1.3]
					Converts different units of measurement [1.1.17]
					Uses calculator to solve mathematical problems [1.1.36
				Science	Applies scientific principles related to protein [1.4.5]
	2.4.4	Examine vegetarianism as a dietary choice	Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
	2.4.5	Describe the consequences of protein deficiencies/excesses		Science	Uses equipment and techniques related to healthy food techniques [1.4.23]
	2.4.6	Demonstrate the use of a food dehydrator and food slicer to prepare high protein snacks			

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do			ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**		**Skill Group**	**Skill**	**Description**
2.5 Describe the role of fats in health, appearance, and peak performance	2.5.1	Analyze the connection between fats and health issues: cholesterol, heart disease, hypertension, obesity, cancer, and diabetes	Foundation	Listening	Comprehends ideas and concepts related to the role of fats in nutrition [1.2.1]
				Reading	Comprehends written information for main ideas [1.3.7]
	2.5.2	Categorize food sources as saturated, unsaturated, and trans fatty acids		Science	Applies scientific principles related to the role of fats in nutrition [1.4.5]
	2.5.3	Analyze and calculate daily fat needs in calories and grams using a kitchen calculator		Mathmatics	Converts different units of measurement [1.1.17]
	2.5.4	Demonstrate the use of a rotisserie, grill, or wok to reduce the fat in foods		Science	Uses equipment and techniques related to nutrition [1.4.23]
					Uses calculator to solve mathematical problems [1.1.36]
			Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
					Uses logic to draw conclusions from available information [4.5.6]
				Mathmatics	Applies mathematical formula to solve a problem [1.1.3]
2.6 Describe the role of vitamins in health, appearance, and peak performance	2.6.1	Chart deficiencies/excesses of vitamins (conditions, symptoms, causes, etc.)	Foundation	Listening	Comprehends ideas and concepts related to the role of vitamins in nutrition [1.2.1]
	2.6.2	Assess the need for vitamin supplements		Reading	Comprehends written information for main ideas [1.3.7]
	2.6.3	Research functions and sources of antioxidants and phytochemicals		Science	Applies scientific principles related to vitamins [1.4.5]
	2.6.4	Demonstrate the use of a juicer to prepare a vitamin-rich beverage			Uses equipment and techniques related to healthy food techniques [1.4.23]
				Math	Constructs graphs/charts/tables [1.1.16]
			Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do		ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**	**Skill Group**	**Skill**	**Description**
2.7 Describe the role of minerals in health, appearance, and peak performance	2.7.1 Chart the deficiencies/excesses of macrominerals and microminerals	Foundation	Listening	Comprehends ideas and concepts related to the role of minerals in nutrition [1.2.1]
	2.7.2 Assess the need for mineral supplements		Reading	Comprehends written information for main ideas [1.3.7]
	2.7.3 Demonstrate the use of a blender/smoothie machine to prepare a calcium rich beverage		Arithmetic/ Mathematics	Constructs graphs/charts/tables [1.1.16]
			Science	Applies scientific principles related to minerals [1.4.5]
				Uses equipment and techniques related to nutrition [1.4.23]
		Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
2.8 Describe the role of water in health, appearance, and peak performance	2.8.1 Compile nutritional information from various brands of bottled water and compare to tap water	Foundation	Arithmetic/ Mathematics	Applies computation skill to subject [1.1.5]
			Listening	Comprehends ideas and concepts related to nutrition [1.2.1]
	2.8.2 Determine water loss/replacement needs during physical activity		Reading	Comprehends written information for main ideas [1.3.7]
	2.8.3 Explain the dangers of dehydration to the body		Science	Applies scientific principles related to water [1.4.5]
			Problem Solving	Comprehends ideas and concepts related to subject [4.4.1]
		Thinking	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]

Unit 3: Nutrition: Take it Personally!
Hours: 13

Terminology: Anorexia nervosa, Binge eating disorder, Bulimia nervosa, Dietary Guidelines for Americans, Eating disorder, Food additive, Food drug Interaction, Genetic engineering, Irradiation, MyPyramid

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do			ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**		**Skill Group**	**Skill**	**Description**
3.1 Define terms related to the personal aspects of nutrition	3.1.1	Demonstrate knowledge of nutrition and wellness terms using correct context	Foundation	Reading	Applies/Understands technical words that pertain to Nutrition! Take it Personally [1.3.6]
				Writing	Applies/Uses technical words and concepts [1.6.4]
3.2 Describe the Dietary Guidelines for Americans and MyPyramid	3.2.1	Describe personal nutrition needs according to MyPyramid.gov	Foundation	Arithmetic/ Mathematics	Performs basic computations [1.1.31]
				Reading	Uses written resources (books, dictionaries, directories) to obtain factual information [1.3.23]
	3.2.2	Create and analyze a meal plan according to the Dietary Guidelines for Americans and MyPyramid		Science	Records data related to subject[1.4.22]
	3.2.3	Critique daily food intake for prevention of potential health problems			Uses equipment and techniques related to healthy food techniques [1.4.23]
	3.2.4	Demonstrate use of crepe maker, grill, and/or quesadilla maker to prepare healthier foods	Thinking	Decision Making	Evaluates information/ data to make best decision [4.2.5]
				Problem Solving	Draws conclusions from observations, evaluates conditions, and gives possible solutions [4.4.5]
				Knowing How to Learn	Locates appropriate learning resources to acquire or improve knowledge and skills [4.3.3]
3.3 Identify reliable sources of food and nutrition information	3.3.1	Analyze information on food labels	Foundation	Reading	Draws conclusions from what is read [1.3.12]
	3.3.2	Critique health claims related to nutrition and wellness		Writing	Analyzes data, summarizes results, and makes conclusions [1.6.2]
			Thinking	Decision Making	Evaluates information/data to make best decision [4.2.5]

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do			ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**		**Skill Group**	**Skill**	**Description**
					Uses logic to draw conclusions from available information [4.5.6]
			Interpersonal Skills	Teamwork	Works effectively with others to reach a common goal [2.6.6]
3.4 Examine the relationship of nutrition and wellness to individual and family health throughout the life cycle	3.4.1	Distinguish nutrient needs/concerns during pregnancy, lactation, infancy, toddlerhood, childhood, adolescence, adulthood, older adults, illness and special diets	Foundation	Reading	Applies information and concepts derived from printed materials [1.3.3]
				Science	Applies scientific principles related to the relationship of nutrition and wellness [1.4.5]
	3.4.2	Design a menu plan for special dietary needs	Thinking	Decision Making	Comprehends ideas and concepts related to nutrition and the family life cycle [4.2.2]
				Problem Solving	Demonstrates logical reasoning in reaching a conclusion [4.4.2]
				Reasoning	Uses logic to draw conclusions from available information [4.5.6]
3.5 Identify possible food drug interactions	3.5.1	Research cases of food drug interactions	Foundation	Reading	Applies information and concepts derived from printed materials [1.3.3]
				Science	Acquires and processes scientific data [1.4.1]
					Applies a scientific principle to solve a problem [1.4.8]
				Writing	Summarizes written information [1.6.17]
			Thinking	Decision Making	Evaluates information/ data to make best decision [4.2.5]
					Sees relationship between two or more ideas, objects, or situations [4.5.5]
3.6 Assess the impact of food and diet fads, food addictions, and eating disorders on wellness	3.6.1	Differentiate between safe and unsafe weight loss practices	Foundation	Science	Acquires and processes scientific data [1.4.1]
					Applies a scientific principle to solve a problem [1.4.8]
	3.6.2	Illustrate characteristics/causes of eating disorders with risks to teens and athletes			

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do				ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge		**Application**		**Skill Group**	**Skill**	**Description**
				Foundation	Writing	Summarizes written information [1.6.17]
				Thinking	Decision Making	Evaluates information/data to make best decision [4.2.5] Sees relationship between two or more ideas, objects, or situations [4.5.5]
3.7	Describe food preparation techniques to conserve essential nutrients	3.7.1	Demonstrate food preparation techniques to conserve essential nutrients	Foundation	Listening	Listens to follow directions [1.2.6]
					Reading	Draws conclusions from what is read [1.3.12]
					Science	Acquires and processes scientific data [1.4.1] Applies knowledge to complete a practical task [1.4.3] Uses equipment and techniques related to nutrition [1.4.23]
				Thinking	Reasoning	Comprehends ideas and concepts related to food preparation [4.5.2]
3.8	Determine how science and technology impact nutrient content of foods	3.8.1	Research the effects of irradiation, food additives, genetic engineering, and other recent technological advances on nutrition	Foundation	Science	Acquires and processes scientific data [1.4.1]
					Writing	Summarizes written information [1.6.17]
				Thinking	Reasoning	Determines which conclusions are correct when given a set of facts and a set of conclusions [4.5.3]
		3.8.2	Assess how science and technology impact nutrition and wellness through the processing and product development of foods			
3.9	Identify careers related to nutrition	3.9.1	Research careers related to nutrition	Foundation	Reading	Draw conclusions from what is read [1.3.12]
					Writing	Analyzes data, summarizes results, and makes conclusions [1.6.2]
				Personal Management	Career Awareness	Explores career opportunities related to Nutrition [3.1.6]

Unit 4: Your Active Lifestyle
Hours: 15

Terminology: Aerobic activity, Anabolic steroid, Anaerobic activity, Balance, Body composition, Body Mass Index (BMI), Carbohydrate loading, Cardio respiratory endurance, Coordination, Electrolytes, Endurance, Energy balance, Fad diets, Flexibility, Intensity, Physical activity, Physical fitness, Sedentary, Strength, Target heart rate

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do		**ACADEMIC and WORKPLACE SKILLS** What the Instruction Should Reinforce		
Knowledge	**Application**	**Skill Group**	**Skill**	**Description**
4.1 Define terms related to physical fitness	4.1.1 Demonstrate knowledge of nutrition and wellness terms using correct context	Foundation	Reading	Applies/Understand technical words that pertain to physical fitness [1.3.6]
			Writing	Applies/Uses technical words and concepts [1.6.4]
4.2 Explain the six components of physical fitness 1) Body composition 2) Cardio-respiratory endurance 3) Coordination and balance 4) Flexibility 5) Muscular endurance 6) Muscular strength	4.2.1 Design a visual of the six components of physical fitness	Foundation	Science	Constructs model to depict basic concept of fitness components [1.4.11]
			Speaking	Organizes ideas and communicates oral messages to listeners [1.5.7]
			Problem Solving	Devises and implements a plan of action to resolve problem [4.4.3]
		Personal Management	Self-Esteem	Develops/Initiates a plan for self-improvement[3.5.4]
4.3 Describe how physical activity promotes fitness	4.3.1 Participate in a variety of fitness tests	Foundation	Reading	Applies/Understands technical words that pertain to fitness [1.3.6]
			Science	Describes/Explains scientific principles related to human maintenance/management [1.4.14]
		Thinking	Reasoning	Sees relationships between two or more ideas, objects, or situations [4.5.5]
4.4 Identify different types of physical activity as aerobic or anaerobic	4.4.1 Differentiate the benefits of aerobic and anaerobic activities for the body	Thinking	Listening	Receives and interprets verbal information [1.2.8]
			Speaking	Organizes ideas and communicates oral messages to listeners [1.5.7]
	4.4.2 Calculate individual target heart rate			

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do				ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge		**Application**		**Skill Group**	**Skill**	**Description**
				Interpersonal	Writing	Communicates thoughts, ideas, or facts in written form in a clear, concise manner [1.6.6]
					Coaching	Encourages others to develop personal and professional skills [2.1.2]
				Foundation	Arithmetic/ Mathematics	Computes using a formula [1.1.14]
						Converts different units of measurement [1.1.17]
4.5	Describe excuses people give for being sedentary	4.5.1	Propose solutions to obstacles which prevent active living	Foundation	Listening	Receives and interprets verbal messages [1.2.8]
					Speaking	Organizes ideas and communicates oral messages to listeners [1.5.7]
					Writing	Presents answers/conclusions in a clear and understandable form [1.6.13]
4.6	Describe factors to consider when choosing physical activities	4.6.1	Analyze appropriate physical activities for individuals	Thinking	Reading	Identifies relevant details, facts, and specifications [1.3.16]
					Writing	Presents answers/conclusions in a clear and understandable form [1.6.13]
				Interpersonal	Reasoning	Sees relationship between two or more ideas, objects, or situations [4.5.5]
4.7	Summarize ways to fit physical activity into daily life	4.7.1	Compile a list of individual activities, exercise classes, or team sports	Thinking	Reading	Comprehends written information and applies it to a task [1.3.8]
		4.7.2	Develop and implement a personal plan for physical activity using the F.I.T. formula (Frequency, Intensity, and Time)		Science	Describes/Explains scientific principles related to human maintenance/management [1.4.14]
					Speaking	Organizes ideas and communicates oral messages to listeners [1.5.7]
		4.7.3	Use a pedometer to compute/calculate average steps walked daily		Writing	Communicates thoughts, ideas, or facts in written form in a clear, concise manner [1.6.6]
				Personal Management	Self-Esteem	Develops/Initiates a plan for self-improvement [3.5.4]

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do				ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge		**Application**		**Skill Group**	**Skill**	**Description**
4.8	Identify ways to keep physical activity safe and healthy	4.8.1	Investigate ways to prevent injuries and check progress	Personal Management	Listening	Receives and interprets verbal messages [1.2.8]
					Reading	Uses written resources (books, dictionaries, directories) to obtain factual information [1.3.23]
					Science	Describes/Explains scientific principles related to human maintenance/management [1.4.14]
					Writing	Presents answers/conclusions in a clear and understandable form [1.6.13]
4.9	Describe how physical activity affects nutrient needs	4.9.1	Plan menus that help fuel the body before competition using MyPyramid.gov	Foundation	Reading	Applies/Understands technical words that pertain to physical competition [1.3.6]
					Science	Records data related to MyPyramid[1.4.21]
					Reasoning	Sees relationships between two or more ideas, objects, or situations [4.5.5]
4.10	Discuss food and beverage strategies for peak performance	4.10.1	Predict effects of different beverages and foods on energy levels and body performance	Foundation	Reading	Applies information and concepts derived from printed material [1.3.3]
						Comprehends written information and applies it to a task (1.3.8)
						Draws conclusions from what is read [1.3.12]
					Speaking	Organizes ideas and communicates oral messages to listeners [1.5.7]
4.11	Distinguish between sports nutrition facts and myths	4.11.1	Chart effects of anabolic steroids and other supplements on current and future health	Foundation	Arithmetic/ Mathematics	Constructs graphs, charts, tables [1.1.16]
				Thinking	Reasoning	Sees differences between two or more ideas, objects, or situations [4.5.5]

CAREER and TECHNICAL SKILLS What the Student Should be Able to Do		ACADEMIC and WORKPLACE SKILLS What the Instruction Should Reinforce		
Knowledge	**Application**	**Skill Group**	**Skill**	**Description**
4.12 Explain why suggested body weight varies for individuals	4.12.1 Determine suggested body weight for individuals	Foundation	Reading	Identifies relevant details, facts, and specifications [1.3.16]
	4.12.2 Compare and contrast methods of measuring body composition including: BMI, bioelectrical impedance, skin fold test, and hydrostatic weighing		Science	Uses equipment and techniques related to measuring body fat[1.4.23]
		Thinking	Reasoning	Sees differences between two or more ideas, objects, or situations [4.5.5]
	4.12.3 Utilize the body fat analyzer to determine body composition			
4.13 Describe healthy ways to achieve and maintain appropriate body weight	4.13.1 Analyze healthy weight loss and weight gain strategies	Thinking	Reading	Comprehends written information and applies it to a task [1.3.8]
		Personal Management	Writing	Presents answers/conclusions in a clear and understandable form [1.6.13]
4.14 Identify careers related to exercise and fitness	4.14.1 Research careers related to exercise and fitness	Foundation	Reading	Draws conclusions from what is read [1.3.12]
			Writing	Analyzes data, summarizes results, and makes conclusions [1.6.2]
		Personal Management	Career Awareness	Explores career opportunities related to exercise and fitness [3.1.6]

Glossary
Unit 1: Nutrition, Wellness, and You

1. Culture – everything about the way a group of people lives
2. Emotional health – the overall condition of a person's emotions
3. Health – combined state of physical, psychological, emotional, and social well being
4. Lifestyle – everything about the way one person, a couple, or a family choose to live
5. Nutrition – the study of nutrients and how they are used by the body
6. Organic food – a food produced without the use of synthetic fertilizers, pesticides, or growth hormones
7. Physical health – the overall condition of a person's body
8. Psychological health – the overall condition of a person's attitudes
9. Social health – the overall condition of a person's ability to relate to others around them
10. Technology – the application of scientific knowledge for practical purposes such as reaching goals, meeting needs, and solving problems
11. Wellness – the process of acquiring and maintaining physical, psychological, emotional, and social health

Unit 2: The Nutrition Health Connection

1. Amino acid – one of the building blocks of protein molecules
2. Antioxidant – a substance that helps protect your body from cell damage that can lead to health problems
3. Atherosclerosis – hardened and narrowed arteries caused by plaque deposits
4. Carbohydrate – an essential nutrient that is the body's main source of energy; includes sugars and starches
5. Cholesterol – a waxy liquid found in every cell of the body; found in foods from animal sources
6. Complete protein – a protein that contains all the essential amino acids
7. Complex carbohydrates – starches; carbohydrates made of many sugars attached together
8. Dehydration – a state in which the body contains a lower than normal amount of body fluid
9. Dental caries – tooth decay
10. Diabetes mellitus – lack of, or inability to use the hormone insulin, which results in the build up of glucose in the bloodstream
11. Dietary fiber – plant material that cannot be digested
12. Diuretic – a substance that increases urine production
13. Essential amino acid – an amino acid that cannot be made by the body and must be supplied by the diet
14. Fat – a nutrient that provides a concentrated source of energy, and helps protect the body from sudden changes in outside temperature
15. Fat soluble vitamin – a vitamin that dissolves in fats; A,D,E, and K
16. HDL (High Density Lipoprotein) – picks up cholesterol from around the body and transports it back to the liver for removal from the body
17. Hypoglycemia – low blood glucose levels
18. Incomplete protein – a protein that is missing one or more of the essential amino acids
19. Lactose intolerance – inability to digest lactose
20. LDL (Low Density Lipoprotein) – carries cholesterol made by the liver to the blood cells
21. Macromineral – a mineral required in the diet in an amount of 100 milligrams or more per day
22. Micromineral – a mineral required in the diet in an amount less than 100 milligrams per day

23. Minerals – nutrients that regulate the body processes or become a part of body tissues

24. Non essential amino acid – an amino acid that can be synthesized by the body

25. Nutrient – a chemical substance in food that helps to maintain the body

26. Phytochemicals – health-enhancing non-nutrient compounds in plant foods that are active in the body at the cellular level

27. Protein – one of the six basic nutrients composed of carbon, hydrogen, oxygen, and nitrogen; the body uses it for growth and maintenance

28. Saturated fatty acid – a fatty acid that has no double bonds in its chemical structure and carries a full load of hydrogen atoms; solid at room temperature.

29. Simple carbohydrates – sugars; carbohydrates made of one or two sugar units

30. Starch – a polysaccharide that is the storage form of energy in plants; a complex carbohydrate found in foods such as potatoes, corn, rice, grits, pasta, oatmeal, and cornmeal

31. Sugars – a collective term used to refer to all the monosaccharides and disaccharides

32. Trans-fatty acid – a fatty acid with an odd molecule shape that forms when oils are partially hydrogenated

33. Unsaturated fatty acid – a fatty acid that has at least one double bond between two carbon atoms in a carbon atom chain and is missing at least two hydrogen atoms; is liquid at room temperature

34. Vegetarianism – practice of eating a diet consisting entirely or largely of food from plant sources

35. Vitamins – nutrients that don't provide energy or build body tissue, but help regulate these and other body processes

36. Water soluble vitamin – a vitamin that dissolves in water and is not stored in the body; examples include vitamin C or B complex

Unit 3: Nutrition: Take it Personally!

1. Anorexia nervosa – a psychological disorder in which one eats very little or refuses to eat
2. Binge eating disorder – a psychological disorder in which one binges but does not purge or exercise excessively
3. Bulimia nervosa – a psychological disorder in which one repeatedly binges and then purges
4. Dietary Guidelines for Americans – a set of guidelines about food choices developed by the US government
5. Eating disorder – extreme, unhealthy behavior relating to food, eating and weight
6. Food additive – a substance added to food products that causes desired changes in the products
7. Food drug interaction – a physical or chemical effect a drug has on a food or a food has on a drug
8. Genetic engineering – the science of changing the genetic makeup of an organism
9. Irradiation – a commercial food preservation method that exposes food to gamma rays to increase shelf life and kill harmful microorganisms
10. MyPyramid – USDA's guide for a personalized approach to healthy eating and physical activity; found at www.mypyramid.gov

Unit 4: Your Active Lifestyle

1. Aerobic activity – physical activity that requires oxygen as it works the heart and lungs
2. Anabolic steroid – an artificial hormone used to build a more muscular body
3. Anaerobic activity – an activity in which the muscles are using oxygen faster than the heart and lungs can deliver it
4. Balance – being able to control the muscles and stay upright as one moves his body (see also Coordination)
5. Body composition – the percentage of different types of tissues in the body, such as fat, muscle, and bone
6. Body Mass Index (BMI) – a calculation of body weight and height used to define underweight, healthy weight, overweight, and obesity
7. Carbohydrate loading – a technique used by endurance athletes to trick the muscles into storing glycogen for extra energy
8. Cardio respiratory endurance – how well the heart and lungs can keep up with physical activity
9. Coordination – being able to control the muscles and stay upright as one moves his body
10. Electrolytes – sodium, chloride, and potassium working together to maintain the body's fluid balance
11. Endurance – the ability to keep working the muscles without becoming overly tired
12. Energy balance – the point at which the energy from the food eaten equals the energy used by the body
13. Fad diets – weight loss plans that are popular for a short time and are often based on misinformation, unusual requirements, and promises of immediate weight loss
14. Flexibility – the ability to move muscles and joints through a full range of motion
15. Intensity – the speed and power of movement during physical activities
16. Physical activity – the use of muscles to move the body
17. Physical fitness – a state in which all body systems function together efficiently
18. Sedentary – physically inactive
19. Strength – power to work the muscles against resistance
20 Target heart rate – the range of heartbeats per minute at which the heart muscle receives the best workout; 60 to 90 percent of maximum heart rate